AMENDMENT NO. 1 MARCH 2017
TO
IS 15275 : 2003 PADLOCKS — SPECIFICATION

(*Page* 1, *clause* **3.1.12**) — Insert the following new clause at the end:

'**3.1.13** *Handmade Lever Type Padlocks with Male or Female Keys*

A detectable and portable handmade lever type padlock in which key wards and the corresponding levers are usually made manually, mostly manufactured by the cottage and small scale units for locking doors, boxes, almirahs, etc. For iron padlocks, see Figs. 4 and 5 and Table 8, for brass padlocks see Fig. 6, Table 9.'

(*Page* 3, *clause* **3.4.6**) — Insert the following new clause at the end:

'**3.5 Terms Related to Handmade Lever Padlocks**

3.5.1 *Body* **—** The housing where majority parts of the lock are located.

3.5.2 *Shackle* **—** The hinges or sliding part of a padlock which passes through the staple, loop or other device on the door. It shall have a notch at its free end, cut exactly to fit the locking bolt.

3.5.3 *Front and back plates* **—** The front and back plates shall be cut from mild steel sheet. The rivet holes on the plates shall be made correctly to correspond to the holes on the body.

3.5.4 *Guide Pin* **—** Lever pivot pin, lever spring fulcrum pin, and key pivot pin and rivets various parts of lock needed for its construction.

3.5.5 *Locking Bolt* **—** Moving part in lock where the shackle gets locked or unlocked.

3.5.6 *Keys* **—** Each padlock shall be supplied with two keys. The male keys can be of leaded tin bronze (LTB) or solid forged mild steel. Female keys shall also be solid forged mild steel.

3.5.7 *Lever Spring Wire* **—** Wire which gives spring action to levers.

3.5.8 *Key Hole Cover* **—** Movable cover to prevent dust and water entering keyway in the lock shall be of brass or aluminium or zinc.

3.5.9 *Lever and Lever Cover Plate* **—** Shall be of brass sheet, cast brass or steel sheet'

(*Page* 4, *clause* **5**) — Substitute the following for existing:

5 SHAPES

The typical shape and design of padlocks and their parts indicated in Figs. 1, 2, 3, 4, 5 and 6 are intended to be illustrative and for guidance only. Other shapes and designs may also be made as per manufacture's patent or as agreed to between the purchaser and the supplier.'

(*Page* 4, *Figs*. 3) — Insert the following Figs. after Fig. 3:

Price Group 4

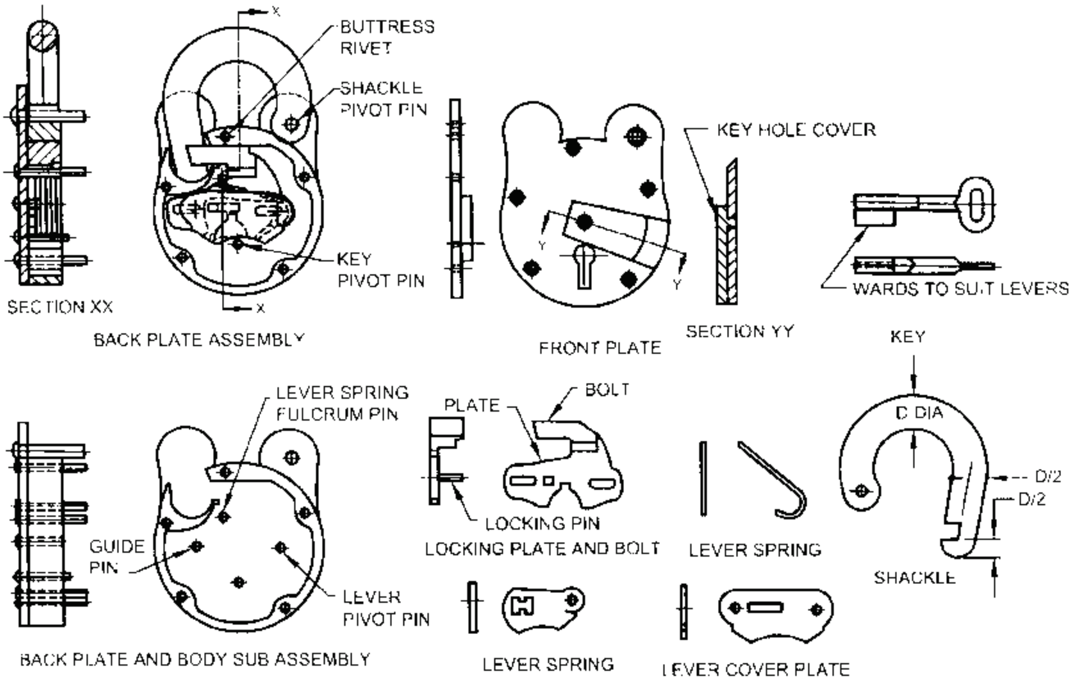

FIG. 4 HANDMADE LEVER TYPE IRON PADLOCK

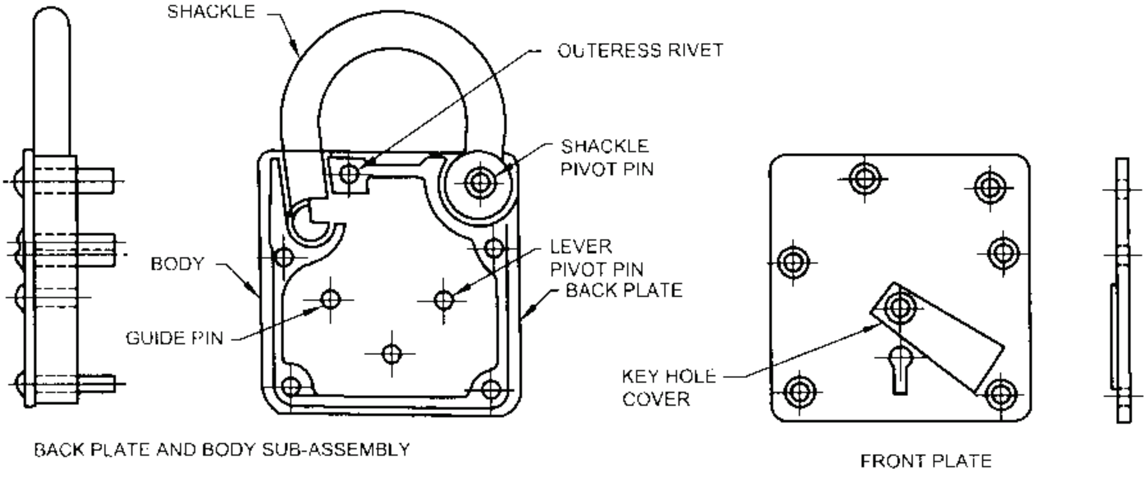

FIG. 5 HANDMADE ALTERNATE SHAPE OF IRON PADLOCK

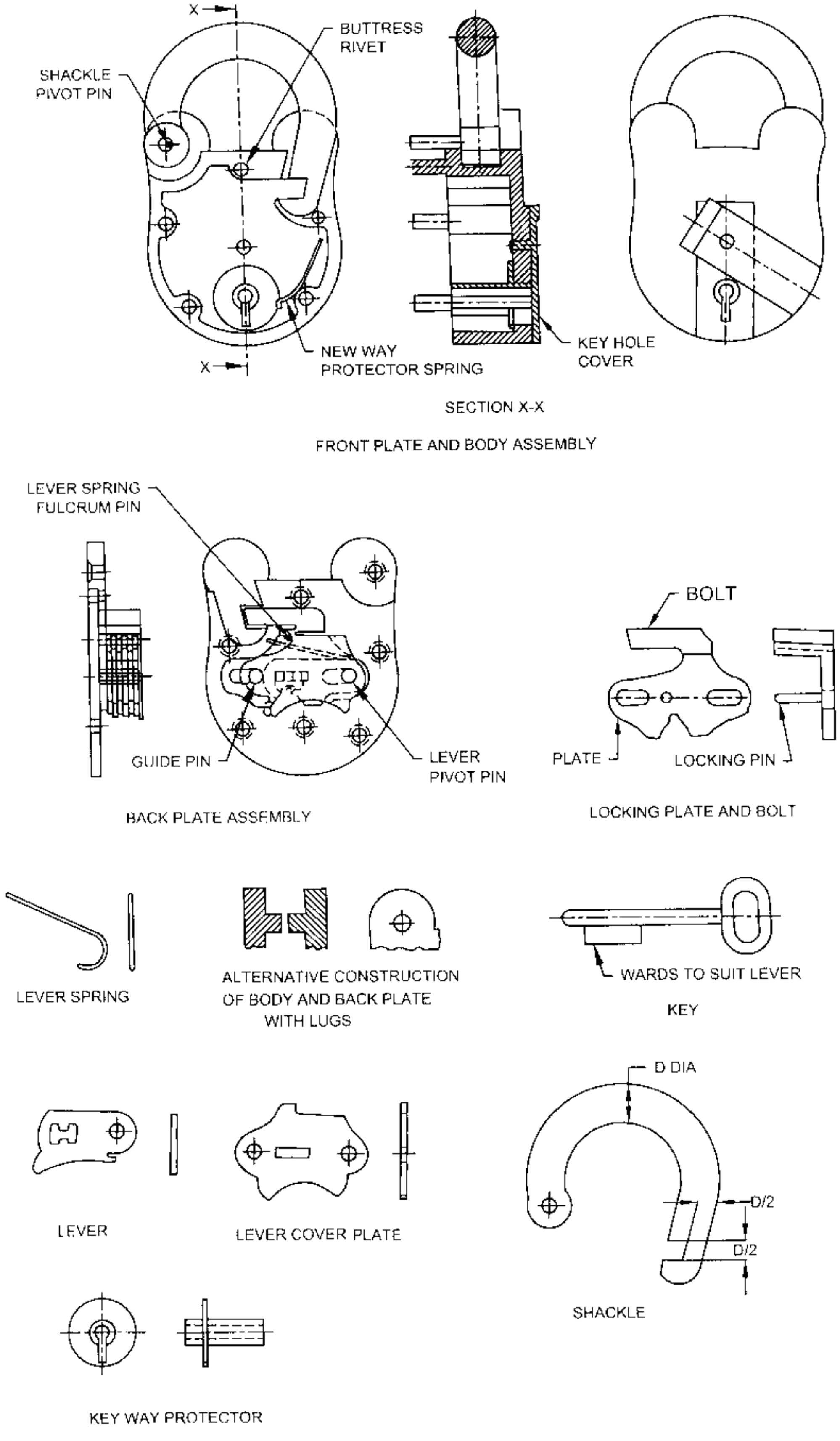

FIG. 6 HANDMADE BRASS PADLOCK

(*Page* 7, *clause* **6**) — Substitute the following for existing:

The components of the various types of padlocks shall be manufactured from the recommended material in Table 3, 4, 5, 6 and 6(A) and the manufacturer may select suitable material for the manufacturer of Padlock. However the assembled lock shall meet the functional requirement as given in Table 7.

(*Page* 7, *Table* 6) — Insert the following table after Table 6:

Table 6 (A) Recommended Material for Hand-Made Lever Padlock
(*Clause* 6)

Sl No. (1)	**Recommended Material** (2)	**Component** (3)	**Required Specification** (4)
i)	Mild steel	Front and back plates, bodies, shackles, rivets, shackle pivot pin, lever pivot pin, guide pin, lever spring fulcrum pin, locking bolt, pins, keys, lever and lever cover plate.	IS 2062 IS 513
ii)	Galvanised mild steel wire or zinc plated	Rivets	IS 280
iii)	Cast brass	Locking bolt, Key hole cover	IS 292
iv)	Brass sheet	Levers, cover plate, locking bolt and key hole cover.	IS 410
v)	Brass wire or Phosphor bronze wire or Steel wire	Spring wire for levers	The lever spring shall be fitted into the lever and shall be pressed down so as to touch the top edge of the lever and released. This shall be repeated six times. At the end of the test the spring shall regain its original position. IS 4454 (Part 1), IS 4454 (Part 2) and IS 4454 (Part 4) (any suitable grade)
vi)	Leaded tin bronze	Keys	Grade LTB2 of IS 318
vii)	Stainless steel	Locking bolt	IS 6911

(*Page* 8, *clause* **7.2.2**) — Insert the following new clause at the end:

‘7.3 Sizes, Dimensions and Tolerances of Handmade Padlocks

The leading dimensions of brass and galvanized iron padlocks and their components and tolerances there on shall conform to those given in Tables 8 and 9, respectively.’

(*Page* 9, Table 7) – Insert the following tables after Table 6:

Table 8 Dimensions of Handmade Lever Type Iron Padlock

(*Clauses* 7.3.1 *and* 3.1.13)

Sl No. (1)	**Size of Padlock (Nominal)** mm (2)	**Thickness of Front and Back Plates** mm (3)	**No. of Rivets Excluding the Pivot Pins** *Min* mm (4)	**Dia of Rivets** mm (5)	**Distance Between Adjacent Rivets** mm (6)	**Dia of Guide Pin and Lever Pivot Pin** mm (7)	**Dia of Level Spring Fulcrum Pin** mm (8)	**Thickness of Locking Bolt Plate, Min** (*see* Notes) mm (9)	**Thickness of Locking Bolt** (*see* Notes) mm (10)	**Thickness of Locking Pin** mm (11)	***Thickness of Lever,** *Min* mm (12)	**Dia of Lever Spring** mm (13)	**Thickness of Lever Cover Plate,** *Min* mm (14)	**Dia of Shackle** mm (15)	**Dia of Shackle Pin** mm (16)	**Inside Depth of the Body** mm (17)	**Thickness of Keyhole Cover** mm (18)	**Size of Key**				**Dia of Key Piv-Ot** mm (23)
																		Thickness of Key Ward mm (19)	Overall Length mm (20)	Outside Dia of		
																				Male key mm (21)	Fe-male key mm (22)	
i)	30	3.2	4	2.5	20	2.50	2.50	1.6	3.2	1.6	1.25	0.71	0.90	5.0	2.50	8.0	2.5	1.6	30	3.2	4.5	-
ii)	35	3.2	4	2.5	20	2.50	2.50	1.6	3.2	1.6	1.25	0.71	0.90	6.0	2.50	8.0	2.5	1.6	35	3.2	4.5	-
iii)	40	3.2	5	2.50	25	2.50	2.50	2.0	4.0	1.6	1.25	0.90	0.90	8.0	3.15	10.0	2.5	1.6	45	4.0	5.0	2.50
iv)	50	3.2	5	3.15	30	3.15	3.15	2.8	5.0	2.5	1.60	1.25	1.25	10.0	4.00	11.0	3.2	2.0	50	4.0	5.0	3.15
v)	65	5.0	5	3.15	35	3.15	3.15	3.2	6.3	2.5	2.00	1.60	1.60	12.0	5.00	15.0	4.0	2.0	65	5.0	6.0	3.15
vi)	75	5.0	5	4.00	40	4.00	4.00	4.0	6.3	3.2	2.24	1.60	1.60	16.0	5.00	18.0	5.0	2.5	75	5.0	6.0	4.00
vii)	90	6.3	5	5.00	45	5.00	5.00	5.0	7.0	3.5	3.15	2.50	2.50	20.0	6.30	20.0	5.0	3.0	85	5.5	6.3	4.00
vii)	Tolerances	+0.80 /-0.40	–	±0.25	± 3.00	±0.25	±0.25	–	±0.40	±0.40	–	±0.10	–	±0.50	±0.25	±0.40	±0.40	±0.20	±2.00	±0.30	±0.30	±0.25

NOTES

1 In the above table, thickness for levers, locking bolt plates and lever cover plates have been given for four levers. In case padlocks, with more than four levers are required, these thicknesses should be correspondingly reduced.

2 The dimensions for which tolerances have not been provided shall be subject to normal engineering tolerances.

Table 9 Dimensions of Handmade Lever Type Brass Padlock

(*Clauses* 7.3.1 *and* 3.1.13)

Sl No. (1)	**Size of Padlock (Nominal)** mm (2)	**Thickness of Front Plate** mm (3)	**Thickness of Black Plate** mm (4)	**No. of Rivets Excluding Pivot Pins,** *Min* mm (5)	**Dia of Rivets** mm (6)	**Distance Between Adjacent Rivets** mm (7)	**Dia of Guide Pin and Lever Pivot Pin** mm (8)	**Dia of Level Spring Fulcrum Pin** mm (9)	**Thickness of Locking Bolt Plate,** *Min* (*see* Notes) mm (10)	**Thickness of Locking Bolt** mm (11)	**Thickness of Locking Pin** mm (12)	**Thickness of Lever,** *Min* (*see* Notes) mm (13)	**Dia of Lever Spring** mm (14)	**Thickness of Lever Cover Plate,** *Min* mm (15)	**Dia of Shackle** mm (16)	**Dia of Shackle Pin** mm (17)	**Thickness of Wall of Body** mm (18)	**Thickness of Keyhole Cover** mm (19)	**Size of Key**			
																			Thickness of Key ward mm (20)	Overall Length mm (21)	Outside Dia of shank	
																					Male key Mm (22)	Female key Mm (23)
i)	30	1.6	3.2	5	2.50	20	2.50	2.00	1.6	3.2	1.6	1.25	0.71	0.90	5.0	3.15	1.6	2.5	1.6	35	3.2	4.5
ii)	35	1.6	3.2	5	2.50	20	2.50	2.00	1.6	3.2	1.6	1.25	0.71	0.90	6.0	3.15	1.6	2.5	1.6	40	3.2	4.5
iii)	40	2.5	4.0	5	3.15	25	3.15	2.50	2.5	4.0	1.6	1.60	0.90	1.25	8.0	4.00	2.5	3.2	1.6	45	4.0	5.0
iv)	50	3.2	4.0	5	4.00	30	3.15	2.50	2.5	5.0	2.5	1.60	0.90	1.25	10.0	5.00	3.2	3.2	2.0	50	4.0	5.0
v)	65	4.0	4.5	5	5.00	35	4.00	3.15	3.2	6.3	2.5	2.00	1.25	1.60	12.0	5.60	3.2	3.2	2.0	65	5.0	6.0
vi)	75	5.5	6.3	5	6.30	40	5.00	4.00	3.2	6.3	3.2	2.50	1.60	2.00	16.0	6.30	4.0	4.0	2.5	75	5.0	6.0
vii)	90	6.3	6.3	5	6.30	45	5.00	4.00	4.0	7.0	3.5	3.15	2.00	2.50	20.0	6.30	4.0	4.0	3.0	85	5.5	6.3
vii)	Tolerances	+0.40/ -0	+0.40/ -0	–	±0.25	±3.00	±0.25	±0.25	-	±0.40	±0.40	–	±0.10	–	±0.50	±0.25	+0.40/ -0	±0.40	±0.20	±2.00	±0.30	±0.30

NOTES

1 In the above table, thickness for levers, locking bolt plates and lever cover plates have been given for four levers. In case padlocks with more than four levers are required, these thicknesses should be correspondingly reduced.

2 The dimensions for which tolerances have not been provided shall be subject to normal engineering tolerances (medium type) in accordance with IS 2102 (Part 1).

(*Page* 8, *clause* **8.3**) — Substitute the following for existing clause:

'**8.3** The body of the padlock, the shackle, the front and back plate, rivets and pins, if required, shall be suitably painted/plated or galvanized or zinc plated. The shackle and keys for brass padlocks shall, however be finished bright.'

(*Page* 9, *clause* **10.3**, *informal table*) — Substitute the following for existing:

Nominal Size of Lock mm	*Minimum Shackle Diameter* mm	*Tensile load* kgf
25	4	75
30	4	75
35	4	120
40	5	150
45	6	200
50	6	200
55	8	400
60	8	400
65	9	500
70	10	600
75	11	800
85	12	900
90	12	900

NOTE — For handmade padlocks (lever type) tensile load is 74 kgf (for 30 mm), 74 kgf (for 35 mm), 124 kgf (for 40 mm), 156 kgf (for 50 mm), 247 kgf (for 65 mm), 291 kgf (for 75 mm) and 407 kgf (90 mm).

(MED 33)

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